

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: KEVIN SCOTT BEYER et al.

Serial No.: 10/605,448

Group Art Unit: 2162

Filed: 09/30/2003

Examiner: Dennis Myint

Title: *Extensible Decimal Identification System for Ordered Nodes*

REPLY BRIEF

Attn: Board of Patent Appeals and Interferences
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Appeal Brief filed 7/08/2008, and the Examiner's Answer dated 09/16/2008, Applicants submit the following reply.

REMARKS

This Reply Brief is in response to the Examiner's Answer dated 09/16/2008. Reconsideration of this application is respectfully requested in view of the foregoing remarks. In addition, all of the arguments in the appeal brief of 07/08/2008 and prior responses should also be considered in support of the claimed elements provided in the present invention.

STATUS OF CLAIMS

Claims 1-22 were previously canceled.

Claims 23-44 are pending.

Claims 23-44 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over O'Neil et al. (U.S. Patent 6,889,226), hereafter O'Neil, in view of Rizzo et al. (U.S. Published Application 2004/0068500), hereafter Rizzo).

Claims 23-44.

Claims 23-44 are hereby appealed.

RESPONSE TO EXAMINER'S ANSWER

Applicants' independent claim 23 teaches a robust computer-based method for updating a computer-stored hierarchical structure of nodes via a node identification technique, wherein the nodes of the are stored as encoded values in a computer storage. Applicants' claim 23 also explicitly recites the step of calculating a new ID value based upon node ID value(s), wherein the new ID value is based upon a low/high key value, with the high key value representing a highest encodable value (e.g., 1111) and the low key value representing a lowest encodable value (e.g., 0000).

Applicants' Appeal Brief filed 7/08/2008 details the differences in the node insertion/deletion schemes of the present invention and that of O'Neil. Applicants maintain the insertion and deletion scheme of O'Neil fails to render obvious the features of Applicants' claims. Specifically, Applicants' maintain that O'Neil fails to disclose any insertion or deletion based on high or low key values, and further fails to disclose the calculation of a new ID value based on such high or low key values.

Further, it should be noted that Rizzo does not relate, in any manner, to the storage, updating or deleting of nodes. Rizzo merely teaches a data sorting apparatus comprising a storage sorter that sorts a data set according to a defined criteria and a query mechanism that receives intermediate sorted data values from the storage sorter and compares the intermediate sorted data values to at least one key value. It was specifically pointed out that the context of "key value" as used in Rizzo is entirely different than that of the present invention and that of values described in O'Neil.

Applicants maintain that a key value, as used by Rizzo, merely refers a value that intermediate sorted data values of compared against. It was also pointed out that O'Neil does not have any teachings for such a value that is to be compared against for sorting purposes (as O'Neil is not concerned with sorting), and even if it did, it would not be the same as the high and low key values that are used to calculate new ID values as per the teachings of the present invention.

Also, as stated in the Appeal Brief, Rizzo mentions that the 'key field' associated with the 'key value' can have a range associated with it, wherein the range is from negative infinity (-

INF) to positive infinity (+INF). Applicants have repeatedly stated that such a teaching of comparing values associated with data sorting CANNOT be equated to Applicants' high and low key values that are used in assigning node ID values in a hierarchical structure.

The Examiner has yet to provide any evidence as to how the combination of O'Neil's hierarchical structure and Rizzo's data sorter would have provided a teaching for a key field range that is used to represent low and high key values in node ID calculations. Further, Applicants also maintain that the Examiner has yet to provide any evidence as to why such a mere range can be interpreted to represent low and high key values that can be combined with the teachings of Rizzo to calculate node values.

Applicants therefore maintain that there is no teaching for Rizzo's key field range to be used to represent low and high key values in node ID calculations.

The above-mentioned arguments with regards to claim 23 also apply to claim 31 as it also teaches similar features. Also, claim 39 recites the feature of calculating a new ID value for node to be inserted based upon a low key value 0 or a high key value x, wherein the calculation is performed via one of the follows ways: concatenating said left node ID value with one or more high key values and a positive value or concatenating said left node ID value with one or more low key values and a positive value. Applicants maintain that the combination of O'Neil's hierarchical structure and Rizzo's data sorter would NOT have provided a teaching for concatenating said left node ID value with one or more high key values (i.e., **highest binary encodable value**) and a positive value or concatenating said left node ID value with one or more low key values (i.e., **lowest binary encodable value**) and a positive value.

At least for the reasons set forth above, further in view of the previously submitted Appeal Brief of 7/08/2008, Applicants maintain that the combination of O'Neil and Rizzo cannot teach or suggest the features of independent claims 23, 31, and 39.

SUMMARY

None of the references, cited or applied, provide for the specific claimed details of Applicants' presently claimed invention, nor renders them obvious. It is believed that this case is in condition for allowance and reconsideration thereof and early issuance is respectfully requested.

As this Reply Brief has been timely filed within the set period of response, no petition for extension of time or associated fee is required. However, the Commissioner is hereby authorized to charge any deficiencies in the fees provided to Deposit Account No. 50-4098.

Respectfully submitted,

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